

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Anderson, et al.

Group Art Unit: 2152

Serial No.: 10/617,001

Examiner: Dailey, Thomas

Filed: July 9, 2003

Docket No. 200209524-1

For: **Systems and Methods Transmitting Graphical Data**

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop: Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

This Appeal Brief under 37 C.F.R. § 41.37 is submitted in support of the Notice of Appeal filed January 28, 2008, responding to the Final Office Action mailed September 26, 2007.

It is not believed that extensions of time or fees are required to consider this Appeal Brief. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor are hereby authorized to be charged to Deposit Account No. 08-2025.

I. Real Party in Interest

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. Related Appeals and Interferences

There are no known related appeals or interferences that will affect or be affected by a decision in this Appeal.

III. Status of Claims

Claims 13-16, 25, 28, and 38 have been canceled leaving claims 1-12, 17-24, 26, 27, and 29-37 remaining. Each of those claims stands finally rejected. No claims have been allowed. The final rejections of claims 1-12, 17-24, 26, 27, and 29-37 are appealed.

IV. Status of Amendments

This application was originally filed on July 9, 2003, with thirty-eight (38) claims. In a Response filed April 26, 2007, Applicant amended claims 3, 17, 19, 21, 24, 26, 27, and 29 and canceled claims 13-16, 25, 28, and 38.

All of the above-identified amendments have been entered and no other amendments have been made to any of claims 1-12, 17-24, 26, 27, and 29-37. The claims in the attached Claims Appendix (see below) reflect the present state of those claims.

V. Summary of Claimed Subject Matter

The claimed inventions are summarized below with reference numerals and references to the written description (“specification”) and drawings. The subject matter described in the following appears in the original disclosure at least where indicated, and may further appear in other places within the original disclosure.

Independent claim 1 describes a method for transmitting graphical data via a communication line. The method comprises generating graphical data representative of a user input. *Applicant’s specification*, page 8, lines 6-9; Figure 3, item 302. The method of claim 1 further comprises buffering the graphical data in memory. *Applicant’s specification*, page 8, lines 14-15; Figure 3, item 306. The method of claim 1 further comprises transmitting portions of the graphical data over the communication line to a remote device at a controlled rate that does not exceed a predetermined maximum data transfer rate at which a bandwidth of the communication line would be exceeded. *Applicant’s specification*, page 8, lines 19-23; Figure 3, item 308.

Independent claim 6 describes a method for transmitting graphical data via a communication line. The method comprises generating graphical data representative of a user input. *Applicant’s specification*, page 10, lines 4-6; Figure 4, item 402. The method of claim 6 further comprises identifying discrete data points of the generated

graphical data. *Applicant's specification*, page 10, lines 7-9; Figure 4, item 406. The method of claim 6 further comprises transmitting only the identified discrete data points over the communication line to a remote device such less than all of the generated graphical data is transmitted so as to not exceed a bandwidth of the communication line. *Applicant's specification*, page 10, lines 23-24; Figure 4, item 408.

Independent claim 17 describes a method for transmitting graphical data via a communication line. The method comprises generating graphical data representative of a user input. *Applicant's specification*, page 13, lines 16-18; Figure 7, item 702. The method of claim 17 further comprises identifying a reference data point. *Applicant's specification*, page 13, lines 19-21; Figure 7, item 706. The method of claim 17 further comprises transmitting information that describes the reference data point via the communication line. *Applicant's specification*, page 14, lines 3-4; Figure 7, item 708. The method of claim 17 further comprises identifying relative coordinates of a further data point that identify the location of the further data point relative to the reference data point. *Applicant's specification*, page 14, lines 6-8; Figure 7, item 710. The method of claim 17 further comprises transmitting the coordinates to another device via the communication line. *Applicant's specification*, page 14, lines 13-15; Figure 7, item 712.

Independent claim 24 describes a computer-readable memory that stores a system for sharing graphical data via a communication line. The memory comprises means for receiving voice data. *Applicant's specification*, page 4, lines 17-20. The memory of claim 24 further comprises means for generating graphical data representative of a user input entered into a touch-sensitive display. *Applicant's specification*, page 8, lines 6-9; Figure 3, item 302. The memory of claim 24 further

comprises means for simultaneously transmitting the voice data and information representative of the generated graphical data via the communication line such that a bandwidth of the communication line is not exceeded, wherein the means for transmitting comprise means for buffering the graphical data and means for transmitting portions of the graphical data over the communication line at a controlled rate that does not exceed a predetermined maximum data transfer rate. *Applicant's specification*, page 2, lines 18-23; page 8, lines 14-15 and lines 19-23; Figure 3, items 306 and 308.

Independent claim 26 describes a computer-readable memory that stores a system for sharing graphical data via a communication line. The memory comprises means for receiving voice data. *Applicant's specification*, page 4, lines 17-20. The memory of claim 26 further comprises means for generating graphical data representative of a user input entered into a touch-sensitive display. *Applicant's specification*, page 10, lines 4-6; Figure 4, item 402. The memory of claim 26 further comprises means for simultaneously transmitting the voice data and information representative of the generated graphical data via the communication line such that a bandwidth of the communication line is not exceeded, wherein the means for transmitting comprise means for identifying discrete data points of the generated graphical data and means for transmitting only the identified discrete data points over the communication line such less than all of the generated graphical data is transmitted. *Applicant's specification*, page 2, lines 18-24; page 10, lines 7-9; Figure 4, items 406 and 408.

Independent claim 27 describes a computer-readable memory that stores a system for sharing graphical data via a communication line. The memory comprises

means for receiving voice data. *Applicant's specification*, page 4, lines 17-20. The memory of claim 27 further comprises means for generating graphical data representative of a user input entered into a touch-sensitive display. *Applicant's specification*, page 13, lines 16-18; Figure 7, item 702. The memory of claim 27 further comprises means for simultaneously transmitting the voice data and information representative of the generated graphical data via the communication line such that a bandwidth of the communication line is not exceeded, wherein the means for transmitting comprise means for identifying a reference data point, means for transmitting information that describes the reference data point via the communication line, means for identifying coordinates of a further data point that identify the location of the further data point relative to the reference data point, and means for transmitting the coordinates via the communication line. *Applicant's specification*, page 2, lines 18-24; page 13, lines 19-21; page 14, lines 3-4, 6-8, and 13-15; Figure 7, items 706, 708, 710, and 712.

Independent claim 29 describes an independent sketchpad device. The device comprises a processing device (200, Figure 2). *Applicant's specification*, page 5, lines 18-22. The device of claim 29 further comprises an input device (206, Figure 2) that is configured to receive voice data from a separate telephone. *Applicant's specification*, page 6, lines 10-17. The device of claim 29 further comprises a user interface (204, Figure 2) with which a user can input information. *Applicant's specification*, page 6, lines 3-9. The device of claim 29 further comprises an output device (206, Figure 2) that is configured to transmit data. *Applicant's specification*, page 6, lines 10-17. The device of claim 29 further comprises memory (202, Figure 2) that includes a sketch

program (212, Figure 2) that identifies user input entered via the user interface and that generates graphical data representative of the user input, and a transmission control manager that is configured to, via the output device, simultaneously transmit the voice data and information representative of the generated graphical data via a communication line such that a bandwidth of the communication line is not exceeded.

Applicant's specification, page 2, lines 18-24; page 8, lines 6-9; Figure 3, item 302.

VI. Grounds of Rejection to be Reviewed on Appeal

The following grounds of rejection are to be reviewed on appeal:

1. Claim 3 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.
2. Claims 1-12, 21-24, and 26 have been rejected under 35 U.S.C. § 102(b) as being anticipated by *Laube* (U.S. Pat. No. 4,653,086).
3. Claims 17-20 and 27 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Laube* in view of *Lamb* (U.S. Pat. No. 6,791,571).
4. Claims 29-36 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Laube* in view of *Torihata, et al.* ("Torihata," U.S. Pat. No. 4,794,634).
5. Claim 37 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Laube* in view of *Torihata* as applied to claim 29, in view of *Kishimoto, et al.* ("Kishimoto," U.S. Pat. No. 4,597,101).

VII. Arguments

The Appellant respectfully submits that Applicant's claims are not improper under 35 U.S.C. § 112 and are neither anticipated under 35 U.S.C. § 102 nor obvious under 35 U.S.C. § 103. Appellant therefore respectfully requests that the Board of Patent Appeals overturn the final rejections of those claims at least for the reasons discussed below.

A. Claim Rejections - 35 U.S.C. § 112, Second Paragraph

Claim 3 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

On page 2 of the final Office Action, the Examiner argues that the phrase "no more than approximately 2 kilobits of graphical data is transmitted per second" in claim 3 is somehow inconsistent with Applicant's specification. Applicant disagrees.

As was acknowledged by the Examiner, Applicant explicitly discloses controlling a data transmission rate such that it "*does not exceed* a predetermined maximum data transfer rate". *Applicant's specification*, page 8, lines 19-21 (emphasis added). Furthermore, Applicant explicitly discloses an example maximum data transfer rate of "*approximately 2 kilobits per second.*" *Applicant's specification*, page 8, lines 22-23 (emphasis added). It therefore follows that Applicant explicitly discloses the claimed transmitting graphical data to "such that no more than approximately 2 kilobits of graphical data is transmitted per second" in Applicant's specification. Applicant notes that the phrase "does not exceed x" is clearly equivalent to "no more than x."

In the Advisory Action, the Examiner readdressed the issue as to the alleged indefiniteness of claim 3. In the Advisory Action, the Examiner acknowledged that (i) Applicant discloses limiting a data transmission rate to a maximum data transfer rate, and (ii) that the maximum data transfer rate can be “approximately 2 kilobits per second”. Applicant respectfully submits that those two attributes in combination directly yield a data transfer rate that is “no more than approximately 2 kilobits of graphical data is transmitted per second” as recited in claim 3. Therefore, the Examiner’s statements actually prove that claim 3 is not in conflict with Applicant’s disclosure and, therefore, is not indefinite.

In view of the above, it is respectfully asserted that the limitations of claim 3 both agree with Applicant’s specification and define the invention in the manner required by 35 U.S.C. § 112. Accordingly, Applicant respectfully requests that the rejection be reversed.

B. Claim Rejections - 35 U.S.C. § 102(b)

Claims 1-12, 21-24, and 26 have been rejected under 35 U.S.C. § 102(b) as being anticipated by *Laube* (U.S. Pat. No. 4,653,086). Applicant respectfully traverses.

It is axiomatic that “[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration.” *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102(b). In the present case, not every feature of the claimed invention is represented in the *Laube* reference. Applicant discusses the *Laube* reference and Applicant’s claims in the following.

1. The Laube Disclosure

Laube discloses a communication terminal that processes both voice and graphical information. *Laube*, Abstract. As described by Laube, the communication terminal 10 includes a telephone set 14, which can be used as a conventional telephone, and a touch sensitive display screen 32, which can be used to generate graphical information to be simultaneously transmitted with voice information over a subscriber line. *Laube*, column 3, lines 19-29; column 4, lines 39-44; and column 5, lines 45-52.

2. Discussion of Applicant's Claims

a. Claims 1-5 and 21-23

Applicant's independent claim 1 provides as follows (emphasis added):

1. A method for transmitting graphical data via a communication line, comprising:
generating graphical data representative of a user input;
buffering the graphical data in memory; and
transmitting portions of the graphical data over the communication line to a remote device at a controlled rate that does not exceed a predetermined maximum data transfer rate at which a bandwidth of the communication line would be exceeded.

Regarding claim 1, Laube does not teach "transmitting portions" of graphical data "at a controlled rate that does not exceed a predetermined maximum data transfer rate at which a bandwidth of the communication line would be exceeded". Applicant notes that column 5, lines 47-52 of the Laube reference, which were relied upon in the final

Office Action, do not teach transmitting any data “at a controlled rate”. Instead, that portion of the Laube reference merely states that voice and graphical information are transmitted “*within* a limited bandwidth.” *Laube*, column 5, lines 50-51 (emphasis added). Laube’s reference to “limited bandwidth” is a reference to the *frequency band* (i.e., range of frequencies) used to transmit the voice and graphical information, not the *rate* at which graphical data is transmitted.

Applicant further notes that column 7, lines 1-10 of the Laube reference, which were also relied upon in the final Office Action, do not teach transmitting any data “at a controlled rate”. Instead, that portion of the Laube reference merely states that a frequency multiplexer provides for simultaneous transmission of voice and “redundancy reduced graphical data”. Because Laube does not define what “redundancy reduced graphical data” is, it cannot be determined from the reference what Laube is describing. Regardless, it is clear that transmitting “redundancy reduced graphical data” is not a teaching of transmitting data “at a controlled rate”.

Regarding the Examiner’s argument on page 3 of the final Office Action that “[t]ransmission using frequency division multiplexing inherently is done at a controlled rate with a predetermined maximum data transfer rate, i.e. bandwidths of the frequency divisions,” Applicant disagrees. Specifically, the term “frequency division multiplexing” denotes dividing a transmission among multiple frequencies, not limiting a data transfer rate relative to a predetermined maximum data transfer rate.

In the Advisory Action, the Examiner reasserted that frequency division multiplexing inherently requires transmitting data “at a controlled rate that does not

exceed a predetermined maximum data transfer rate” and cited section 8.3, paragraph 1, lines 4-7 of the “Signals and Systems” book, which provide:

Many systems used for transmitting signals provided more bandwidth than is required for any one signal. For example, a typical microwave link has a total bandwidth of several gigahertz, which is considerably greater than the bandwidth required for one voice channel.

Signals and Systems, page 594, section 8.3. The above excerpt actually supports Applicant’s position. Specifically, the above excerpt clearly establishes that the term “bandwidth” is used to identify transmission frequencies, *not* transmission rates. That fact is clear given that the excerpt quantifies bandwidth in terms of *gigahertz*, i.e., which is a unit of measure for frequency, *not* transmission rate.

b. Claims 6-12 and 21-23

Applicant’s independent claim 6 provides as follows (emphasis added):

6. A method for transmitting graphical data via a communication line, comprising:

generating graphical data representative of a user input;
identifying discrete data points of the generated graphical data; and
transmitting only the identified discrete data points over the communication line to a remote device such less than all of the generated graphical data is transmitted so as to not exceed a bandwidth of the communication line.

Regarding claim 6, Laube does not teach transmitting only “discrete data points over the communication line to a remote device such less than all of the generated graphical data is transmitted so as to not exceed a bandwidth of the communication line”. Applicant notes that column 5, lines 47-52 of the Laube reference, which were relied upon in the final Office Action, do not teach transmitting any such “discrete data points”. Instead, that portion of the Laube reference merely states that voice and graphical information are transmitted “within a limited bandwidth.” *Laube*, column 5, lines 50-51. As described above, Laube’s reference to “limited bandwidth” is a reference to the frequencies used to transmit the voice and graphical information, not the rate at which the data that is transmitted.

Applicant further notes that column 7, lines 1-10 of the Laube reference, which were also relied upon in the final Office Action, do not teach transmitting “discrete data points”. Instead, that portion of the Laube reference merely states that the frequency multiplexer provides for simultaneous transmission of voice and “redundancy reduced graphical data”. As noted above, Laube does not define what “redundancy reduced graphical data” is and, therefore, it cannot be determined from the reference what Laube is describing. Regardless, it is clear that Laube’s identification of “redundancy reduced graphical data” is not an actual teaching of “transmitting only . . . discrete data points”. A proper rejection under 35 U.S.C. § 102 requires disclosure of *each element* of the claim under consideration.

Regarding the Examiner’s argument on page 3 of the final Office Action that it “naturally” follows that Laube’s system transmits a “subset of stored coordinate values” simply by virtue of the fact that Laube mentions “extracted coordinate values” in column 6,

Applicant submits that there is absolutely no reason to assume that Laube's system transmits a "subset of stored coordinate values" in view of Laube's disclosure. Simply stated, there is just no support for such an assumption. In columns 6 and 7, Laube indicates that the coordinate values of a user's pen 50 are represented in an image-dotwise manner on the display screen 32 by evaluating extracted coordinate values. Such a disclosure does not necessarily mean, however, that Laube's system transmits only "identified discrete data points over the communication line to a remote device such less than all of the generated graphical data is transmitted". Indeed, for all the reader knows, each and every data point identified by Laube's system is sent to a recipient.

c. Claims 24 and 26

Applicant's independent claims 24 and 26 provide as follows (emphasis added):

24. A computer-readable memory that stores a system for sharing graphical data via a communication line, the system comprising:

means for receiving voice data;

means for generating graphical data representative of a user input entered into a touch-sensitive display; and

means for simultaneously transmitting the voice data and information representative of the generated graphical data via the communication line such that a bandwidth of the communication line is not exceeded, wherein the means for transmitting comprise means for buffering the graphical data and *means for transmitting portions of the graphical data over the communication line at a controlled rate that does not exceed a predetermined maximum data transfer rate.*

26. A computer-readable memory that stores a system for sharing graphical data via a communication line, the system comprising:

means for receiving voice data;

means for generating graphical data representative of a user input entered into a touch-sensitive display; and

means for simultaneously transmitting the voice data and information representative of the generated graphical data via the communication line such that a bandwidth of the communication line is not exceeded, wherein the means for transmitting comprise means for identifying discrete data points of the generated graphical data and *means for transmitting only the identified discrete data points over the communication line such less than all of the generated graphical data is transmitted.*

Beginning with claim 24, Applicant notes that Laube at least does not teach “means for transmitting portions of the graphical data over the communication line at a controlled rate that does not exceed a predetermined maximum data transfer rate” for reasons described above in relation to claim 1. As explained above, Laube’s frequency division multiplexing does not inherently require transmitting portions of data at a controlled rate that does not exceed a predetermined maximum.

Turning to claim 26, Applicant notes that Laube at least does not teach “means for transmitting only the identified discrete data points over the communication line such less than all of the generated graphical data is transmitted” for reasons described above in relation to claim 6. As explained above, Laube does not teach transmitting any such “discrete data points”. Instead, that portion of the Laube reference merely states that voice and graphical information are transmitted “within a limited bandwidth.”

Furthermore, Laube's identification of "redundancy reduced graphical data" is not an actual teaching of "transmitting only . . . discrete data points".

C. Claim Rejections - 35 U.S.C. § 103(a)

As has been acknowledged by the Court of Appeals for the Federal Circuit, the U.S. Patent and Trademark Office ("USPTO") has the burden 35 U.S.C. § 103 to establish obviousness by showing objective teachings in the prior art or generally available knowledge of one of ordinary skill in the art that would lead that individual to the claimed invention. *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). The key to supporting an allegation of obviousness under 35 U.S.C. § 103 is the clear articulation of the reasons why the Examiner believes that claimed invention would have been obvious. See MPEP § 2141. As stated by the Supreme Court, "[r]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR v. Teleflex*, 550 U.S. at ___, 82 USPQ2d at 1396 (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).

Applicant respectfully submits that the Examiner has not established with clearly articulated reasons that Applicant's claims are obvious in view of the prior art. Applicant discusses those claims in the following.

1. Rejection of Claims 17-20 and 27

Claims 17-20 and 27 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Laube* in view of *Lamb* (U.S. Pat. No. 6,791,571). Applicant respectfully traverses this rejection.

a. Claims 17-20

Applicant's independent claim 17 provides as follows (emphasis added):

17. A method for transmitting graphical data via a communication line, comprising:

generating graphical data representative of a user input;

identifying a reference data point;

transmitting information that describes the reference data point via the communication line;

identifying relative coordinates of a further data point that identify the location of the further data point relative to the reference data point;
and

transmitting the coordinates to another device via the communication line.

In the final Office Action, it is acknowledged that *Laube* does not teach “identifying relative coordinates of a further data point that identify the location of the further data point relative to the reference data point”. In view of that shortcoming of the *Laube* reference, the Examiner relies upon the *Lamb* reference, which discloses an “absolute and relative coordinate based format description system.” *Lamb*, Abstract.

As a first matter, Applicant notes that the only portion of the *Lamb* reference that the Examiner relied upon is the Abstract, which provides:

The present invention is embodied in an absolute and relative coordinate based format description system and method for displaying information, such as text, graphics, audio/visual multimedia, hyperlinks, etc. within a computer environment. Multimedia information including text, graphics, audio media, visual media and hyperlinks, is effectively presented and displayed within the computer environment. The multimedia information is contained within geometrical objects, which can be located anywhere within a working area with absolute or relative positioning and properties. Each object can be independent of other objects (absolute values) or dependent on other objects (relative values).

Lamb, Abstract. As can be readily appreciated from the above, *Lamb*'s Abstract does not in fact disclose or suggest transmitting information that describes the reference data point and then "identifying relative coordinates of a further data point that identify the location of the further data point relative to the reference data point". Instead, the Abstract merely makes general reference to an "absolute and relative coordinate based format description system and method."

In his Detailed Description, *Lamb* describes a coordinate based format description for "geometrical objects," such as interactive multimedia, that can be located within an HTML working area. *Lamb*, column 3, lines 18-21 and lines 41-48. In other words, *Lamb*'s format description provides an indication of the locations of multimedia objects in an HTML document, such as a web page. It can therefore be appreciated that *Lamb* does not in fact provide a teaching or suggestion of "identifying relative coordinates of a further data point that identify the location of the further data point

relative to” a reference data point that has already been transmitted. Therefore, Lamb does not provide the disclosure that is missing from the Laube reference.

As a second matter, Applicant respectfully asserts that the Examiner did not provide an “articulated reasoning with some rational underpinning to support” his conclusion of obviousness of the claim limitation at issue as required under *KSR v. Teleflex*. Instead, the Examiner simply block copied Applicant’s claim limitation and made general reference to Lamb’s Abstract. For that reason, the Examiner failed to state a prima facie case of obviousness against Applicant’s claim 17.

As a third matter, Applicant notes that because Lamb does not disclose a method for describing graphical data generated by user input and intended for transmission as claimed by Applicant and disclosed by Laube, a person having ordinary skill in the art simply would not think to add Lamb’s “coordinate based format description” into Laube’s system. Moreover, given the differences in applications described by Laube and Lamb, it is unclear how such addition would be accomplished and the Examiner provided no comment on that issue.

In view of at least the above, Applicant submits that claim 17 and its dependents are not obvious in view of the Laube and Lamb references.

b. Claim 27

Applicant's independent claim 27 provides as follows (emphasis added):

27. A computer-readable memory that stores a system for sharing graphical data via a communication line, the system comprising:

means for receiving voice data;

means for generating graphical data representative of a user input entered into a touch-sensitive display; and

means for simultaneously transmitting the voice data and information representative of the generated graphical data via the communication line such that a bandwidth of the communication line is not exceeded, wherein the means for transmitting comprise means for identifying a reference data point, means for transmitting information that describes the reference data point via the communication line, *means for identifying coordinates of a further data point that identify the location of the further data point relative to the reference data point*, and means for transmitting the coordinates via the communication line.

Regarding claim 27, Laube and Lamb at least fail to teach or suggest means for identifying a reference data point and “means for identifying coordinates of a further data point that identify the location of the further data point relative to the reference data point” at least for reasons discussed above in relation to claim 17. Applicant therefore submits that claim 27 is likewise not obvious in view of the Laube and Lamb references.

2. Rejection of Claims 29-36

Claims 29-36 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Laube* in view of *Torihata, et al.* ("Torihata," U.S. Pat. No. 4,794,634). Applicant respectfully traverses the rejection.

Applicant's independent claim 29 provides as follows (emphasis added):

29. An *independent sketchpad device*, comprising:
a processing device;
an input device that is configured to receive voice data from a separate telephone;
a user interface with which a user can input information;
an output device that is configured to transmit data; and
memory that includes a sketch program that identifies user input entered via the user interface and that generates graphical data representative of the user input, and a transmission control manager that is configured to, via the output device, simultaneously transmit the voice data and information representative of the generated graphical data via a communication line such that a bandwidth of the communication line is not exceeded.

In the final Office Action, it is acknowledged that *Laube* does not disclose or suggest an "independent" sketchpad device, i.e., a sketchpad device independent of a telephone. In view of that shortcoming, the Examiner cites the *Torihata* reference, which is alleged to disclose such an independent sketchpad device in column 7, lines 12-17. That portion of *Torihata*'s disclosure provides as follows:

In this embodiment, the tablet portion 100 and the light emitting pen 200 are preferably mounted on a telephone casing 420 as shown in FIG. 9. However, it is of course possible to provide the tablet portion 100 and the light emitting pen 200 in a separate casing 400 as shown in FIG. 7. In this case, the separate casing 400 and the telephone apparatus must be connected together through a cable.

Torihata, column 7, lines 10-17. As is clear from the above excerpt, *Torihata* is discussing whether a tablet portion 100 and a *light emitting pen 200*, not a telephone, are provided on the same casing. Therefore, the portion of the disclosure relied upon by the Examiner has nothing to do with disclosing or suggesting a sketchpad device that is independent from a telephone. Although Figure 7, which is referenced in the excerpt, shows an independent sketchpad, that sketchpad does not comprise “an input device that is configured to receive voice data from a separate telephone”, “an output device that is configured to transmit data” or memory that includes “a transmission control manager that is configured to, via the output device, simultaneously transmit the voice data and information representative of the generated graphical data via a communication line” as recited in claim 29. Therefore, there is no disclosure or suggestion provided by either applied reference of an independent sketch pad device having the capability of receiving and transmitting data via a communication line.

For at least the above reasons, Applicant submits that claim 29 and its dependents are allowable over the Laube and *Torihata* references.

3. Rejection of Claim 37

Claim 37 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Laube* in view of *Torihata* as applied to claim 29, in view of *Kishimoto, et al.* (“Kishimoto,” U.S. Pat. No. 4,597,101). Applicant respectfully traverses the rejection.

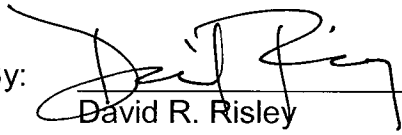
As identified above, *Laube* and *Torihata* do not teach aspects of Applicant’s claims. In that *Kishimoto* does not remedy the deficiencies of the *Laube* and *Torihata* references, Applicant respectfully submits that claim 37 is allowable over the *Laube/Torihata/Kishimoto* combination for at least the same reasons that claim 29 is allowable over *Laube/Torihata*.

VIII. Conclusion

In summary, it is Applicant's position that Applicant's claims are patentable over the applied prior art references and that the rejection of these claims should be withdrawn. Appellant therefore respectfully requests that the Board of Appeals overturn the Examiner's rejection and allow Applicant's pending claims.

Respectfully submitted,

By:


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Claims Appendix under 37 C.F.R. § 41.37(c)(1)(viii)

The following are the claims that are involved in this Appeal.

1. A method for transmitting graphical data via a communication line, comprising:

generating graphical data representative of a user input;

buffering the graphical data in memory; and

transmitting portions of the graphical data over the communication line to a remote device at a controlled rate that does not exceed a predetermined maximum data transfer rate at which a bandwidth of the communication line would be exceeded.

2. The method of claim 1, wherein generating graphical data comprises generating graphical data representative of a line entered using a touch-sensitive display.

3. The method of claim 1, wherein transmitting portions of the graphical data comprises transmitting portions of the graphical data to such that no more than approximately 2 kilobits of graphical data is transmitted per second.

4. The method of claim 1, further comprising receiving voice data input via a telephone.

5. The method of claim 4, further comprising simultaneously transmitting the voice data over the communication line along with the portions of graphical data.

6. A method for transmitting graphical data via a communication line, comprising:

generating graphical data representative of a user input;

identifying discrete data points of the generated graphical data; and

transmitting only the identified discrete data points over the communication line to a remote device such less than all of the generated graphical data is transmitted so as to not exceed a bandwidth of the communication line.

7. The method of claim 6, wherein generating graphical data comprises generating graphical data representative of a line entered using a touch-sensitive display.

8. The method of claim 6, wherein identifying discrete data points comprises identifying data points on a periodic basis in which a data point is identified for every predetermined period during user input.

9. The method of claim 6, wherein identifying discrete data points comprises identifying data points on a line length basis in which a data point is identified for every predetermined length of user input.

10. The method of claim 6, further comprising buffering the generated graphical data and identifying new discrete data points that are positioned between the previously identified data points and transmitting the new data points over the communication line.

11. The method of claim 10, further comprising repeating the steps of claim 10 in an iterative process.

12. The method of claim 6, further comprising receiving voice data input via a telephone and transmitting the voice data over the communication line simultaneously with the data points.

13-16. (Canceled)

17. A method for transmitting graphical data via a communication line, comprising:

generating graphical data representative of a user input;

identifying a reference data point;

transmitting information that describes the reference data point via the communication line;

identifying relative coordinates of a further data point that identify the location of the further data point relative to the reference data point; and

transmitting the coordinates to another device via the communication line.

18. The method of claim 17, wherein generating graphical data comprises generating graphical data representative of a line entered using a touch-sensitive display.

19. The method of claim 17, further comprising identifying a new reference data point, transmitting information that describes the new reference data point via the communication line, identifying relative coordinates of another data point that identify the location of the other data point relative to the new reference data point, and transmitting the coordinates via the communication line.

20. The method of claim 17, further comprising receiving voice data input via a telephone and transmitting the voice data over the communication line simultaneously with coordinates.

21. The method of claim 1, 6, or 17, further comprising providing an indication to the user entering the input that communicates what portion of the input has been transmitted or is currently visible to a recipient.

22. The method of claim 21, wherein providing an indication comprises showing a portion of the input in at least one of a different color, a different grayscale, and a different line thickness.

23. The method of claim 22, further comprising removing the indication after passage of a period of time.

24. A computer-readable memory that stores a system for sharing graphical data via a communication line, the system comprising:

means for receiving voice data;

means for generating graphical data representative of a user input entered into a touch-sensitive display; and

means for simultaneously transmitting the voice data and information representative of the generated graphical data via the communication line such that a bandwidth of the communication line is not exceeded, wherein the means for transmitting comprise means for buffering the graphical data and means for transmitting portions of the graphical data over the communication line at a controlled rate that does not exceed a predetermined maximum data transfer rate.

25. (Canceled)

26. A computer-readable memory that stores a system for sharing graphical data via a communication line, the system comprising:

means for receiving voice data;

means for generating graphical data representative of a user input entered into a touch-sensitive display; and

means for simultaneously transmitting the voice data and information representative of the generated graphical data via the communication line such that a bandwidth of the communication line is not exceeded, wherein the means for transmitting comprise means for identifying discrete data points of the generated graphical data and means for transmitting only the identified discrete data points over the communication line such less than all of the generated graphical data is transmitted.

27. A computer-readable memory that stores a system for sharing graphical data via a communication line, the system comprising:

means for receiving voice data;

means for generating graphical data representative of a user input entered into a touch-sensitive display; and

means for simultaneously transmitting the voice data and information representative of the generated graphical data via the communication line such that a bandwidth of the communication line is not exceeded, wherein the means for transmitting comprise means for identifying a reference data point, means for transmitting information that describes the reference data point via the communication line, means for identifying coordinates of a further data point that identify the location of the further data point relative to the reference data point, and means for transmitting the coordinates via the communication line.

28. (Canceled)

29. An independent sketchpad device, comprising:

- a processing device;
- an input device that is configured to receive voice data from a separate telephone;
- a user interface with which a user can input information;
- an output device that is configured to transmit data; and
- memory that includes a sketch program that identifies user input entered via the user interface and that generates graphical data representative of the user input, and a transmission control manager that is configured to, via the output device, simultaneously transmit the voice data and information representative of the generated graphical data via a communication line such that a bandwidth of the communication line is not exceeded.

30. The sketchpad device of claim 29, wherein the input device comprises a telephone jack.

31. The sketchpad device of claim 29, wherein the user interface comprises a touch-sensitive display.

32. The sketchpad device of claim 29, wherein the output device comprises a modem.

33. The sketchpad device of claim 29, wherein the sketch program is further configured to display the generated graphical information to the user.

34. The sketchpad device of claim 29, wherein the transmission control manager is configured to buffer the graphical data and transmit portions of the graphical data over the communication line at a controlled rate that does not exceed a predetermined maximum data transfer rate.

35. The sketchpad device of claim 29, wherein the transmission control manager is configured to identify discrete data points of the generated graphical data and transmit only the identified discrete data points over the communication line such less than all of the generated graphical data is transmitted.

36. The sketchpad device of claim 29, wherein the transmission control manager is configured to identify a reference data point, transmit information that describes the reference data point via the communication line, identify coordinates of a further data point that identify the location of the further data point relative to the reference data point, and transmit the coordinates via the communication line.

37. The sketchpad device of claim 29, wherein the transmission control manager is further configured to receive via the communication line discrete data points that represent graphical data, generate line segments that connect the discrete data points, and display the line segments such that a resultant line is shown that comprises the line segments and that represents a user input entered into another sketchpad device.

38. (Canceled)

Evidence Appendix under 37 C.F.R. § 41.37(c)(1)(ix)

There is no extrinsic evidence to be considered in this Appeal. Therefore, no evidence is presented in this Appendix.

Related Proceedings Appendix under 37 C.F.R. § 41.37(c)(1)(x)

There are no related proceedings to be considered in this Appeal. Therefore, no such proceedings are identified in this Appendix.